UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,028	11/04/2003	Tim Bianchi	N2215-84536	6162

32009 7590 06/26/2008

BRADLEY ARANT ROSE & WHITE LLP
200 CLINTON AVE. WEST
SUITE 900
HUNTSVILLE, AL 35801

EXAMINER	
DANG, HUNG Q	

ART UNIT	PAPER NUMBER
2612	

MAIL DATE	DELIVERY MODE
06/26/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/701,028	BIANCHI ET AL.	
	Examiner	Art Unit	
	HUNG Q. DANG	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-19 and 21-40* is/are allowed.

6)☒ Claim(s) *20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to application's amendment dated 5/1/2008. The amendments of claims 1, 23, 28 and 40 have been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray et al. U.S. Patent 5,434,911 in view of Emerson et al. U.S. Patent 4,348,730 and in further view of Sears U.S. Patent 5,617,084.

Regarding claim 20, Gray et al. teaches an apparatus for monitoring a meter, comprising:

A meter (Figure 1, unit 8) that monitor usage of a distribution system;

An electronic data recorder (Figure 1, unit 6) that processes data from the meter;

An external unit (Figure 1, unit 4) that controls the processing of data in the electronic data recorder with a communication protocol; and wherein the communication protocol comprises an initialization signal and a clock signal (Figure 2a).

However, Gray et al. does not specifically teach an interval identification signal that identifies a present reading cycle for the data from the meter with a unique signal width of the interval identification signal.

Emerson et al., in the same field of endeavor, teaches an apparatus for monitoring a meter, wherein the communication protocol comprises an interval identification signal that identifies a present reading cycle for the data from the meter with a unique signal width of the interval identification signal for accurately identifying the desired metering data interval (according to the specification of this application (see paragraph [0037]), the claimed time interval identification signal is a signal that is used to indicate a metering data reading time interval, such as 15 min. or 30 min. In figure 2 and columns 3-4 and column 4 lines 55-60 of Emerson; the time interval indicated in figure 2 and the indicated columns show the desired signal width, which is used for indicating a desired time interval).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide such interval identification signal to the apparatus disclosed by Gray et al., as evidenced by Emerson et al., so that a metering data interval can be accurately identified.

Furthermore, Gray et al. does not teach detecting an absence of a flow in the distribution system and determines how long the flow has been absent.

Sears, in the same field of endeavor, teaches an apparatus for monitoring a water meter, which includes a water leak detection capability by detecting an absence and the length absence of water flow in the distribution system during a predetermined

length of time, so that a water leak can be assumed and prevented if there's no water flow detected in a predetermined length of time (such as in a week, a month etc.) (column 10, lines 1-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the detection of an absence and the length of absence of a water flow in the distribution system disclosed by Gray et al., as evidenced by Sears, so that water leak in a water distribution system can be monitored and prevented.

Allowable Subject Matter

4. Claims 1-19 and 21-40 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 20, the prior arts of record fail to teach or disclose an apparatus for monitoring a meter as claimed in claims 1, 23, 28 and 40, wherein the communication protocol comprises an interval identification signal that identifies a present reading cycle for the data from the meter with a unique signal width of the interval identification signal, where the unique signal width comprises a multiple of a signal cycle.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. DANG whose telephone number is (571)272-3069. The examiner can normally be reached on 9:30AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on (571) 272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/
Examiner, Art Unit 2612

/Albert K Wong/
Primary Examiner, Art Unit 2612